

IEEE 1284 Serial→Parallel Converter

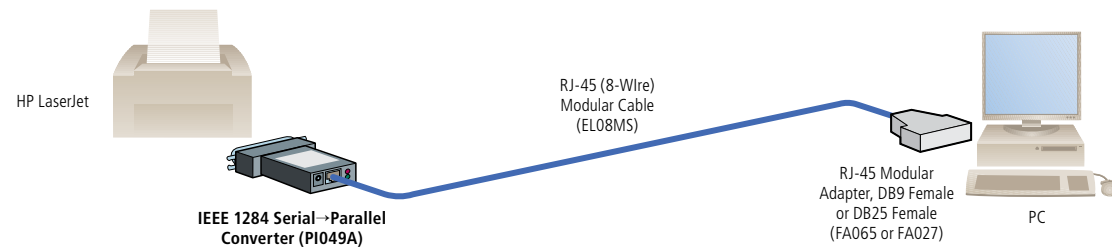
Connect async serial  
hardware to an IEEE 1284  
bidirectional interface.



## FEATURES

- » Converts serial to IEEE 1284 parallel.
- » Runs at speeds up to 115.2 kbps.
- » Supports two IEEE 1284 Bi-Tronics modes: Compatible and Nibble (switchable).
- » Super compact, pocket size.
- » LEDs provide at-a-glance monitoring.
- » Power choices: from both interfaces or from an external power supply.
- » Features 10-kV ESD (electrostatic discharge) protection on the serial interface.

Use your speedy IEEE 1284 laser printer with your async RS-232 hardware!



## OVERVIEW

Get more out of your equipment with the [IEEE 1284 Serial-to-Parallel Converter](#) from Black Box. Use your speedy IEEE 1284 laser printer with your async RS-232/423 hardware. You can use this converter with all your hardware equipped with an IEEE 1284 Bi-Tronics® parallel interface.

This tiny box gives you lots of operational options because it works in either Level 1 Compatible or Nibble modes (according to the IEEE 1284 standard). So it supports the high speeds—up to 115.2 kbps—necessary for graphics-intensive laser-printer applications. Depending on your equipment, all you have to do is set a switch to change modes.

Conversion is simple. On the serial side, the converter translates Nibble operations into standard HP® LaserJet® IV serial printer escape sequences. This enables operation with standard printer drivers.

On the parallel side, the converter translates all commands received from the PC or other serial devices into Bi-Tronics Nibble operations or Compatible operations.

The converter supports all Bi-Tronics Level 1 compatible hardware and is backward-compatible with Level 2 hardware.

## TECH SPECS

**Electrostatic Discharge (ESD) Protection** — 10 kV on the serial interface  
**Flow Control** —

Serial: Hardware or software (X-ON/X-OFF), user selectable;  
Parallel: Hardware

**Leads Supported** — Serial: 1–8;

Parallel: Pins 1–13 active; 31, 32, 36 held high; 16–30 ground

**Power Requirements** — IEEE 1284 B interface must support optional 5 V on Pin 18, IEEE 1284 C must support interface Pin 36; otherwise, use included external AC power supply

**Speed** — 9600 bps; 19.2, 38.4, 115.2 kbps

**Transmission Format** — Serial: Async, full-duplex;

Parallel: IEEE 1284 [supports Nibble and Level 1 compatible modes (switchable)]

**CE Approval** — Yes

**Interface** — RS-232, RS-423

**Connectors** — Serial: (1) RJ-45;

Parallel: (1) 36-pin Centronics M

**Indicators** — (2) LEDs: Power, Data Mode

**Power** — From RS-232/423 and IEEE 1284 interfaces;

External wallmount transformer: Input: 120 VAC, 60 Hz, 10 W;

Output: 9 VDC, 500 mA

**Size** — 3"H x 2.4"W x 0.8"D (7.6 x 6.1 x 2 cm)

**Weight** — 0.5 lb. (0.2 kg)



PI049A

## Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
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- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p.m. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application. Don't waste time and money—call Black Box today.

## Technically Speaking

### IEEE 1284.

Introduced in 1994, the IEEE 1284 standard addresses data-transfer speeds and distance for parallel interfaces. Standard parallel interfaces support speeds of up to 150 kbps at distances of up to 6 feet (1.8 m); IEEE 1284 parallel interfaces can send your data over 100 times faster at up to 5 times the distance!

Although the Centronics® interface enabled only unidirectional computer-to-peripheral data flow, the IEEE 1284 interface enables bidirectional flow so peripherals can send data to the computer.

The IEEE 1284 standard covers five separate parallel modes, from the original Centronics (with which it's compatible) to the high-performance Enhanced Parallel Port (EPP) mode.

The computer negotiates with the attached device to determine which mode to use.

### Item

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### Code

PI049A